April 2010

# South Atlantic Landscape Conservation Cooperative

# **Purpose**

The South Atlantic Landscape
Conservation Cooperative (SALCC)
will facilitate conservation planning and
design across state boundaries in the
South Atlantic Coastal Plain and Piedmont
physiographic provinces, from southern
Virginia to northern Florida. The efforts
of the SALCC will supplement the State
Wildlife Action plans and provide better
coverage for wider ranging species. It will
also provide a broader geographic scale
to address the effects of climate change
and other critical challenges such as
competition for water, wildlife disease,
and exotic species invasion.

The scientific and technical expertise provided by the SALCC will support a landscape-scale, collaborative approach to conservation. This expertise will assist the conservation community as they carry out the functional elements of Strategic Habitat Conservation. These functional elements are: biological planning, conservation design, conservation delivery, monitoring, and research.

The U.S. Fish and Wildlife Service (Service) is collaborating with agencies across the Department of the Interior (DOI) under the Secretarial Order issued in September 2009. The SALCC will work closely with the U.S. Geological Survey (USGS) Climate Science Center. The Center will provide the latest climate science information and data and help the SALCC develop modeling tools and conduct site-specific studies of climate impacts and species and habitat responses. The SALCC will use this information to develop landscape-scale conservation plans that will inform conservation delivery activities and assist partners in focusing their management decisions and conservation actions. In turn, the SALCC will provide the Center information on species and ecosystem responses to climate change and the effectiveness of their conservation actions.

The support provided by the SALCC will not be limited to climate change; rather, it will work to address broadscale changes suspected to affect whole ecosystems (e.g. water quality and quantity, wildlife disease, etc).

### **The Habitat**

The terrestrial and aquatic landscape that comprises the area includes unique and valuable habitats that support concentrated populations of endangered. threatened, and declining species, big and small game species, and a lengthy list of species that Americans treasure such as the Black Bear, Loggerhead Sea Turtle, and Painted Bunting.

Key habitats include Sandhills and Coastal longleaf pine forests and savannahs, Piedmont upland hardwood forest, Piedmont rivers and streams, Coastal bottomland hardwood, as well

as the Okefenokee Swamp and similar swamp forests. Some of the characteristic terrestrial species of this landscape include forest-dependent birds (e.g. red-cockaded woodpecker and the Swainson's warbler), migratory shorebirds and waterfowl (e.g. piping plover and American black duck), and forest-dependent mammals (e.g. Rafinesque's big-eared bat). Aquatic species include freshwater and marine fish (e.g. robust redhorse and Atlantic sturgeon) and freshwater mussels (e.g. brook floater).

# **Adaptation Benefits**

Building on a conservation legacy established with partners for over a century, the SALCC will be one cooperative in a national network of more than 20 that will be a conservation science partnership between the Service, other federal agencies, states, tribes, NGOs, universities and other entities. What's more, it will be a fundamental unit of planning and science capacity that will help us carry out the functional elements of Strategic Habitat Conservation, filling existing gaps in our science capacity,



Pocosin wetlands by USFWS

and ultimately informing our response to accelerating climate change and other stresses.

Some of the data gathered will include climate, land-cover, and land-use trends and patterns as well as species vulnerability and hydrology data in spatially-explicit contexts to develop measureable biological objectives that will guide our resource management decisions and actions. Facing the most compelling conservation challenges of our generation, the science-based partnerships will give our employees and partners the ability to achieve the right conservation in the right places to benefit America's fish and wildlife.

As of last year, more than \$3 million has been committed by partners - including TNC, Duke Power, and Duke University - for projects focused on designing sustainable landscapes, species modeling, and adapting to impacts of accelerating climate change and sea level rise.

This kind of information will help us better adapt to sea level rise and how fish and wildlife will respond across coastal ecosystems. In addition, it will help us expand carbon sequestration activities to more effectively include other habitats such as pocosin wetlands. The result: Treasured landscapes connected to one another and healthier fish and wildlife populations.

# **Organization and Partnerships**

The SALCC is intended to operate as a self-governing partnership with an appropriate committee structure (steering, science, management, etc.) and a core support staff. The partnership structure will be formed to allow partner organizations to provide guidance and support to core LCC staff; ensure management input for science products; utilize the existing science and technical expertise of partner organizations in biological planning and conservation design; and help partner organizations coordinate their individual conservation delivery, monitoring and research efforts toward achieving common goals. The exact process and structure will be developed by the SALCC partners to ensure that the vision and needs of all the partners are incorporated.

The SALCC's capacity depends upon common interests in partner organizations in the region. Beyond a core partnership including the Service, USGS, National Park Service (NPS), and state fish and wildlife agencies, partners could change over time as conservation needs across this geographic area evolve. At this point in its development, partners, which make up the SALCC Interagency Scoping Team include: the Service, USGS, NPS, U.S. Forest Service, Albemarle Pamlico National Estuary Program, Atlantic Coast Joint Venture, Atlantic Coastal Fish Habitat Partnership, Atlantic States



Loggerhead sea turtle returns to the ocean after laying her eggs on the Wassaw National Wildlife Refuge, a barrier island off Georgia's coast, by Caretta Research Project



Marine Fisheries Commission, South Atlantic Fishery Management Council, Southeastern Aquatic Resources Partnership, Florida Fish and Wildlife Conservation Commission, Georgia Wildlife Resources Division, North Carolina Wildlife Resources Commission, South Carolina Department of Natural Resources, Virginia Department of Conservation and Recreation, and Virginia Department of Game and Inland Fisheries.

The Service, USGS and the NPS, as well as other federal and state agencies and conservation organizations, will provide and facilitate the core expertise required to build species-habitat models, conduct assumption-driven research and formulate decision-based monitoring programs. Together with the Service, the USGS will form the backbone of our science capabilities, and provide additional gateways to engage universities and other partners to enhance our capacity for biological planning, conservation design, monitoring and research.

# Capacity

The SALCC core team will include an LCC coordinator who will focus on partnership development and support, and developing and implementing multi-organizational conservation strategies with an emphasis on science-driven decision support tools. The team also will include a science coordinator responsible for coordinating LCC science needs with federal, state and non-governmental organizations' science

professionals. Future additions to the core team may include a climate change adaptation planner, spatial analyst, fisheries/aquatic scientist, ecosystem simulation modeler, population-habitat modeler, hydrologist and a conservation scientist. The Service is bringing the LCC coordinator onboard in July 2010.

## **Next Steps**

The Service has selected Ken McDermond as the LCC coordinator. McDermond is currently the Service's Deputy Regional Director for the Pacific Southwest Region. Until he starts in July,

Laurel Barnhill from the South Carolina Department of Natural Resources will serve as the SALCC interim coordinator.

In addition, the Service will focus new staff resources it will acquire over the next several months through the National Wildlife Refuge System Inventory and Monitoring Program within the SALCC. An I&M coordinator and data manager will be located with the National Park Service in Athens, GA and four new biological positions will be located at national wildlife refuges: Alligator River, Cape Romain, Okefenokee and Savannah. The Service intends to hire a hydrologist, aquatic/marine specialist, terrestrial species specialist, and a forester/botanist into these new positions. Their work will focus on Refuge System I&M and will feed into the SALCC.

In 2010, partners will move to fill additional core team positions and to fund research projects that are a priority to the SALCC.

### For More Information

Laurel Barnhill, Interim SALCC Coordinator, BarnhillL@dnr.sc.gov

Ken McDermond, SALCC Coordinator (as of July 6, 2010), kenneth\_mcdermond@fws.gov

# **To Learn More**

Please visit our Region's web site at http://www.fws.gov/southeast/LCC/SouthAtlantic/